

ABSTRACT

A stainless steel sheet has a chemical composition consisting of 0.15 mass % or less of C, 1.0 mass % or less of Si, 1.0 mass % or less of Mn, 0.005 mass % or less of S, 10-20 mass % of Cr, 0.5 mass % or less of Ni, 0.001-0.05 mass % of Al, optionally one or more of 0.5-2.0 mass % of Mo, 0.5-3.0 mass % of Cu and 0.05-1.0 mass % of Nb, and the balance being Fe except inevitable impurities. It is strengthened by a work-hardened ferritic structure, wherein Al_2O_3 and/or $\text{Al}_2\text{O}_3 \cdot \text{MgO}$ inclusions of $10\mu\text{m}$ or less in size are distributed with cleanliness of 0.06% or less. It is useful as lightweight material for parts and structural members of home electric appliances, office automation devices and so on, due to excellent bendability in addition to high yield strength of 700 N/mm^2 or more.